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This Journal, founded by the Medical Society for the Study of the Venereal Diseases, publishes original work on the investigation and treatment of genitourinary and allied disorders, and review articles, correspondence, and abstracts.

ADVICE TO AUTHORS Papers for publication, which will be accepted on the understanding that they have not been and will not be published elsewhere and are subject to editorial revision, should be sent in duplicate to Prof A Mindel, Academic Department of Sexual Health Medicine, Sydney Hospital, Macquarie St, Sydney 2000, GPO Box 1614, Sydney, NSW, Australia. Tel: 61 2228 2111; Fax: 61 2 221 5810. All authors must give signed consent to publication. Submitted papers must be accompanied by the following statement, signed by all the authors: "No paper resembling the enclosed article has been or will be published except in *Genitourinary Medicine*. We transfer all copyright ownership to *Genitourinary Medicine*." Manuscripts will only be acknowledged if a stamped addressed postcard or international reply coupon is enclosed. Rejected papers will not be returned. Figures will be returned if requested at the time of submission.

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Book reviews 410

(none out of eight clinics consulted practice in this way). Even a small book must avoid over-simplifying these complex issues to a readership that may not be aware of the finer points. Current practice still seems to be more in line with David Miller's advice in his chapter on Counselling and Psychosocial Intervention: As with all pretest information, such discussion should proceed in an unbiased manner that allows the patient to reach an informed decision in their own time.

These, however, are minor quibbles which should not be allowed to mar the overall impression, which is of a clear, concise, accurate and up-to-date text. If there were to be lists of medical best-sellers, this, I'm sure, would be high on the list. CHRIS CARNE

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NOTICES

Quality '93. Raising Quality in the NHS: What progress? 11 November 1993, The Brewery, London

Quality '93 is being organised by the BMA, the BMJ, the Kings Fund, the College of Health and Quality in Healthcare and will review progress with raising quality in the NHS and also look at what's new in raising quality. The meeting is open to doctors, nurses, all health professionals, managers, politicians, researchers, policy makers, and members of the public.

For further details contact: Pru Walters, BMA House, Tavistock Square, London WC1H 9JP, Telephone: 071 383 6518.

The 2nd International Congress Papillomavirus in Human Pathology will be held 6-8 April 1994 at Unesco, Paris. Details may be obtained from: Congress Secretariat, Baxon Communication, 69/73 Av. du General Leclerc, BP 204 92100 Boulogne, France.

The University of Sydney, Department of Public Health. Faculty of Medicine, Master of Medicine (Sexual Health)

Applications are invited from Australian and international medical graduates for enrolment in this unique course, which offers an integrated approach to sexual health, STDs, and HIV infection. Core units include:

- Modern laboratory and clinical sciences;
- International, cross-cultural, and sociological issues;
- Epidemiology, statistics, and health promotion:
- Research Methodology.

Coursework begins 22 February 1994. Application forms and prospectus are available from: Dr Brian P Mulhall or Professor A Mindel, Academic Unit of Sexual Health Medicine, Department of Public Health (A27), University of Sydney, NSW 2006, Tel (02) 692 4390 or (02) 221 2800, Fax (02), 692 4179 or (02) 221 5810. Closing date 25 October 1993.

able from: Dr Brian P Mulhall or Professor A Mindel, Academic Unit of Sexual Health Medicine, Department of Public Health (A27), University of Sydney, NSW 2006, Tel (02) 692 4390 or (02) 221 2800, Fax (02), 692 4179 or (02) 221 5810. Closing date 25 October 1993.

CURRENT PUBLICATIONS

Selected titles from recent reports published worldwide are arranged in the following sections:

Gonorrhoea Chlamvdia Pelvic inflammatory disease Non-specific genital infection Candidiasis Bacterial vaginosis Trichomoniasis Syphilis and other treponematoses Herpes Human papillomavirus infection Cervical cytology and colposcopy Other sexually transmitted diseases Public health and social aspects Microbiology and Immunology Dermatology Miscellaneous

Gonorrhoea

Open study of the safety and efficacy of a single oral dose of azithromycin for the treatment of uncomplicated gonorrhoea in men and women.

MA WAUGH. J Antimicrob Chemother 1993;31:

Clinical algorithms for the screening of women for gonococcal and chlamydial infection-evaluation of pregnant women and prostitutes in Zaire.

B VUYSTEKE, M LAGA, M ALARY, et al. Clin Infect Dis 1993:17:82.

Persistence of multiple serovars of Neisseria gonorrhoeae.

CF JOYCE, GP GARNETT, A RENTON, WHITAKER, C ISON. Sex Transm Dis 1993;20:

Subtyping of Neisseria gonorrhoeae auxotype-serovar groups by pulsed-field gel electrophoresis.

CL POH, QC LAU. J Med Microbiol 1993;38:366.

Detection and some properties of the sialyltransferase implicated in the sialylation of lipopolysaccharide of Neisseria gonor-

RE MANDRELL, H SMITH, GA JARVIS, JM GRIFFISS, JA COLE. Microb Pathogen 1993; 14:307.

Distribution of a lipooligosaccharidespecific sialyltransferase in pathogenic and non-pathogenic neisseria.

RE MANDRELL, JM GRIFFISS, H SMITH, JA COLE. Microb Pathogen 1993;14:315.

Homology between cryptic plasmid from Neisseria gonorrhoeae and genomic DNA from Neisseria meningitidis.

U GRIMHOLT, I OLSAKER, R AALEN, WB GUNDERSEN. APMIS 1993;101:201.

Chlamydia

Detection of Chlamydia trachomatis in urine from men with urethritis.

M BACKMAN, AKM RUDEN, O RINGERTZ, EG SANDSTROM. Eur J Clin Microbiol Infect Dis 1993;12:447.

Evaluation of laparoscopy and endocervical swab in the diagnosis of Chlamydia trachomatis infection of the female genital tract.

B ARENA M CASARES, BH VALENTINE, RPD COOKE. Arch Gynecol Obstet 1993;253:5.

Genital Chlamydia trachomatis infection in Australia.

sm garland, dm gertig, ja mcinnes. $Med~\mathfrak{J}$ Austr 1993;159:90.

Screening for genital chlamydial infection in symptomatic women.

A MITTAL, S KAPUR, S GUPTA. Ind J Med Res Sect B 1993;98:119.

Chlamydia trachomatis in routine cervical smears—a microscopic and ultrastructural analysis.

MR HENRY, KLD JENSEN, CD SKOGLUND, DW ARMSTRONG. Acta Cytol 1993;37:343.

Comparison of spiramycin and doxycycline for treatment of *Chlamydia* trachomatis genital infections.

J DYLEWSKI, B CLECNER, J DUBOIS, C STPIERRE, G MURRAY, C BOUCHARD, R PHILLIPS. Antimicrob Agents Chemother 1993;37:1373.

The relationship of Chlamydia trachomatis infection and male infertility.

GA GREENDALE, ST HAAS, K HOLBROOK, WALSH, J SCHACTER, RS PHILLIPS. Am J Public Health 1993;83:996.

Detection of Chlamydia trachomatis in semen by the polymerase chain reaction in male members of infertile couples.

SS WITKIN, J JEREMIAS, JA GRIFO, WJ LEDGER. Am J Obstet Gynecol 1993;168:1457.

Chlamydia trachomatis, infertility and population growth in Sub-Saharan Africa. RC BRUNHAM, M CHEANG, J McMASTER, G GARNETT, R ANDERSON. Sex Transm Dis 1993; 20:168.

Screening urine with a leukocyte esterase strip and subsequent chlamydial testing of asymptomatic men attending primary care practitioners.

JW SELLORS, JB MAHONY, L PICKARD, et al. Sex Trans Dis 1993;20:152.

Evaluation of molecular typing for epidemiological study of Chlamydia trachomatis genital infections.

P RODRIGUEZ, B DEBARBEYRAC, K PERSSON, B DUTILH, C BEBEAR. J Clin Microbiol 1993;31: 2238.

Comparative evaluation of detection assays for Chlamydia trachomatis.

r warren, b dwyer, m plackett, k pettit, n RIZVI, AM BAKER. J Clin Microbiol 1993;31:

Evaluation of sensitivity of 10 diagnostic assays for Chlamydia trachomatis by use of a simple laboratory procedure.

BJ THOMAS, EJ MACLEOD, D TAYLOR ROBINSON. J Clin Pathol 1993;46:408.

Comparison of the Clearview chlamydia, the PACE 2 assay and culture for detection of Chlamydia trachomatis from cervical specimens in a low-prevalence population.

BLANDING, L HIRSCH, N STRANTON, et al. J Clin Microbiol 1993;31:1622.

Direct fluorescent-antibody confirmation of chlamydial antigen below the detection threshold of the Chlamydiazyme enzymelinked immunosorbent assay.

JA KELLOGG, JW SEIPLE, ES STROLL. J Clin Microbiol 1993;31:1646.

Confirmation of positive results for chlamydial antigen by the Chlamydiazyme assay—value of repeated testing and a blocking antibody assay.

MA OLSEN, AR SAMBOL. J Clin Microbiol 1993; 31:1892.

Evaluation of Pharmacia chlamydia EIA for diagnosis of genital infections caused by Chlamydia trachomatis.

SW CHAN. Pathology 1993;25:68.

Confirmatory testing of Chlamydia trachomatis Syva enzyme immunoassay grey zone specimens by Syva direct fluorescent antibody test.

JL BEEBE, MP RAU, KD ALBRECHT. Sex Transm Dis 1993;20:140.

Detection of Chlamydia trachomatis by the polymerase chain reaction in the cervices of women with acute salpingitis.

SS WITKIN, J JEREMIAS, M TOTH, WJ LEDGER. Am J Obstet Gynecol 1993;168:1438.

Comparison of different primer sets for detection of Chlamydia trachomatis by the polymerase chain reaction.

R ROOSENDAAL IMM WALBOOMERS, OR VELT-MAN, et al. J Med Microbiol 1993;38:426.

A novel approach to the laboratory diagnosis of Chlamydia trachomatis infections using monoclonal anti-idiotypic antibodies.

C LAFFERIORE, RW PEELING, ES TACKABERRY, J HAMEL, JA DILLON, BR BRODEUR. J Immunol Method 1993;163:123.

Antibodies of chlamydia species in patients attending a genitourinary clinic and the impact of antibodies to *C. pneu-moniae* and *C. psittaci* on the sensitivity and the specificity of *C. trachomatis* serology tests.

TR MOSS, S DAROUGER, RM WOODLAND, M NATHAN, RJ DINES, V CATHRINE. Sex Transm Dis 1993;20:61.

The Chlamydia trachomatis mip-like protein is a lipoprotein.

AG LUNDEMOSE, DA ROUCH, CW PENN, JH PEARCE. J Bacteriol 1993;175:3669.

Cell-mediated immune response to the recombinant 57-kDa heat-shock protein of Chlamydia trachomatis in women with salpingitis.

SS WITKIN, J JEREMIAS, M TOTH, WJ LEDGER. J Infect Dis 1993;167:1379.

Expression of a plasmid gene of Chlamydia trachomatis encoding a novel 28-kDa antigen.

M COMANDUCCI, R CEVENINI, A MORONI, et al. J Gen Microbiol 1993;139:1083.

Mapping of a surface-exposed B-cell epitope to the variable sequent-3 of the major outer-membrane protein of Chlamydia trachomatis.

S PAL, X CHENG, EM PETERSON, LM DELAMAZA. J Gen Microbiol 1993;139:1565.

Pelvic inflammatory disease

Gonorrhoea, genital chlamydial infection and non-specific urethritis in male partners of women hospitalized and treated for acute pelvic inflammatory disease.
F KAMWENDO, E JOHANSSON, H MOI, L FORSLIN,

D DANIELSSON. Sex Transm Dis 1993;20:143.

Etiology of acute pelvic inflammatory disease proven by laparoscopy.

M DAN, Z SAMRA, A KATZ, A DEBBY, R GUTMAN, H ZAKUT. Sex Transm Dis 1993;20:168.

Morbidity following pelvic inflammatory

H BUCHAN, M VESSEY, M GOLDACRE, J FAIR-WEATHER. Br J Obstet Gynaecol 1993;100:558.

Delayed care of pelvic inflammatory disease as a risk factor for impaired fertility. SD HILLIS, R LOESOEF, PA MARCHBANKS, JN WASSERHEIT, W CATES, L WESTROM. Am J Obstet Gynecol 1993;168:1503.

Does addition of anti-inflammatory agents to antimicrobial therapy reduce infertility after murine chlamydial salpin-

DV LANDERS, ML SUNG, K BOTTLES, J SCHACTER. Sex Transm Dis 1993;20:121.

Non-specific genital infection

Minocycline compared with doxycycline in the treatment of non-gonococcal urethritis and mucopurulent cervicitis.

B ROMANOWSKI, H TALBOT, M STADNYK, KOWALCHUK, WR BOWIE. Ann Intern Med 1993; 119:16.

Single-dose oral azithromycin versus 7day doxycycline in the treatment of nongonococcal urethritis in males.

J LAUHARANTA, K SAARINEN, MT MUSTONEN, HP HAPPONEN. J Antimicrob Chemother 1993;31:

Comparison of azithromycin and doxycycline in the treatment of non-gonococcal urethritis in men.

PJ LISTER, T BALENCHANDRAN, GL RIDGWAY, AJ ROBINSON. J Antimicrob Chemother 1993;31: 185.

Candidiasis

The risks of symptomatic vaginal candidiasis after oral antibiotic therapy.

TM MACDONALD, PHG BEARDON, MM McGILCHRIST, ID DUNCAN, AD McKENDRICK, DG McDEVITT. *Q J Med* 1993;**86**:419.

Bacterial vaginosis

Efficacy of intravaginal 0.75% metronidazole gel for the treatment of bacterial vaginosis.

SL HILLIER, C LIPINSKI, AM BRISELDEN, DA ESCHENBACH. Obstet Gynecol 1993;81:963.

The normal vaginal flora, H2O2-producing lactobacilli and bacterial vaginosis in pregnant women.

HILLIER, MA KROHN, LK RABE, KLEBANOFF, DA ESCHENBACH. Clin Infect Dis 1993;16:S273.

Bacterial vaginosis and anaerobes in obstetric-gynecologic infection.

DA ESCHENBACH. Clin Infect Dis 1993;16:S282.

Trichomoniasis

Natural history of urogenital trichomoniasis in men.

JN KRIEGER, M VERDON, N SIEGEL, KK HOLMES. J Urol 1993;149:1455.

Prevention of vaginal trichomoniasis by compliant use of the female condom.

DE SOPER, D SHOUPE, GA SHANGOLD, MM SHANGOLD, J GUTMANN, L MERCER. Sex Transm Dis 1993;20: 137.

Trichomonas vaginalis haemolysisdence of functional pores formation on red cells membranes.

PL FIORI, P RAPPELLI, AM ROCCHIGIANI, P CAP-PUCCINELLI. FEMS Microb Lett 1993;109:13.

Interaction between facilitated diffusion of glucose across the plasma membrane and its metabolism in Trichomonas vaginalis. BH TERKUILE, M MULLER. FEMS Microb Lett 1993;110:27.

Syphilis and other treponematoses

The origin of syphilis-clinical and epidemiologic considerations Columbian theory.

A LUGER. Sex Transm Dis 1993;20:110.

Maternal and congenital syphilis in Brooklyn, NY-epidemiology, transmission and diagnosis.

SA RAWSTRON, S JENKINS, S BLANCHARD, PW LI, к вкомвекс. Am J Dis Child 1993;147:727.

Congenital syphilis—when the medium fails to transmit the message.

DL GURRY, PA PORTER, DTP EVANS. Med J Aust 1993;159:121.

Congenital neurosyphilis revisited. B WOLF, K KALANGU. Eur J Pediat 1993;152:

Diagnosis of congenital syphilis by combining Treponema pallidum specific IgM detection with immunofluorescent antigen detection for T. pallidum.

K BROMBERG, S RAWSTRON, G TANNIS. J Infect Dis 1993;168:238.

Placental histopathology in syphilis.

F QURESHI, SM JACQUES, MP REYES. Hum Pathol 1993;24:779.

High syphilis rates among cocaine abusers identified in an emergency department. AA ERNST, DH MARTIN. Sex Transm Dis 1993;

Early syphilis-relationship to sex, drugs and changes in high-risk behaviour from

1987-1990. L FINELLI, J BIDD, KC SPITALNY. Sex Transm Dis 1993;20:89.

Herpes

Herpes simplex virus and other alphaherpes viruses.

Seminars in Virology (whole issue) 1993;4:

Herpes revisited-still a cause of concern. DN CATOTTI, P CLARKE, KE CATOE. Sex Transm Dis 1993;20:77. Oral acyclovir and recurrent genital herpes during late pregnancy.

J HADDAD, B LANGER, D ASTRUC, J MESSER, F LOKIEC. Obstet Gynecol 1993;82:102.

A role for herpes simplex virus in the aetiology of chronic fatigue syndrome and related disorders.

G REID. Med Hypoth 1993;40:301.

Herpes simplex virus detection from genital lesions—a comparative study using antigen detection (HerpChek) and culture.

RW SONE, PD SWENSON, AC HOBSON, M REMING-TON, L COREY. J Clin Microbiol 1993;31:1774.

Analysis of genetic variability of populations of herpes simplex viruses.

JM ROJAS, J DOPAZO, E MARTINBLANCO, C LOPEZGALINDEZ, E TABARES. Virus Res 1993; 28:249.

Neuronal control of herpes simplex virus latency.

RB TENSER, WA EDRIS, KA HAY. Virology 1993;

Recurrent genital infection in the guinea pig-differences between herpes simplex type-1 and type-2.

ML LANDRY, D MYERSON, C BULL. Intervirol 1993;34:169.

Reactivation in-vivo and in-vitro of herpes simplex virus from mouse dorsal root ganglia which contain different levels of latency-associated transcripts.

MS ECOBPRINCE, FJ RIXON, CM PRESTON, K HASSAN, PGE KENNEDY. J Gen Virol 1993;74:

Molecular analysis of a neurovirulent herpes simplex virus type-2 strain with reduced thymidine kinase activity.

S TANAKA, Y TOH, R MORI. Arch Virol 1993; **131**:161.

Immunoelectron microscopic localisation of herpes simplex virus glycoprotein gB in the nuclear envelope of infected cells. R GILBERT, HP GHOSH. Virus Res 1993;28:217.

S-adenosylmethionine metabolism herpes simplex virus type-2-infected cells. c seivwright, jcm macnab, rlp adams. J Gen Virol 1993;74:1405.

Purification and characterization of the herpes simplex virus type-2-encoded uracil-DNA glycosylase.

TA WINTERS, MV WILLIAMS. Virology 1993;195:

The herpes simplex virus type-2 UL3 open reading frame encodes a nuclear localizing phosphoprotein.

DM WORRAD, S CARADONNA. Virology 1993;195:

Human papillomavirus infection

The biology of human papillomavirusesfrom warts to cancer.

LA LAIMINS. Infect Agents Dis 1993;2:74.

Specific human papillomavirus types as the causal agents of most cervical intraepithelial neoplasia—implications current views and treatment.

NB KIVIAT, LA KOUTSKY. J Nat Cancer Inst 1993;85:934.

Epidemiologic evidence showing that human papillomavirus infection causes most cervical intraepithelial neoplasia.

MH SCHIFFMAN, HM BAUER, RN HOOVER, et al. J Nat Cancer Inst 1993;85:958.

HPV DNA and the risk of squamous intraepithelial lesions of the uterine cervix in young women.

AJ LEVINE, J HARPER, L HILBORNE, DL ROSEN-THAL, E WEISMEIER, RW HAILE. Am J Clin Pathol 1992;100:6.

Prospects for cervical cancer vaccines. L CRAWFORD. Cancer Sur 1993;16:215.

Human papillomavirus DNA in urine samples compared with that in simultaneously collected urethra and cervix samples.

O FORSLUND, BG HANSSON, P RYMARK B BJERRE. J Clin Microbiol 1993;31:1975.

Vulvar squamous papillomatosis and human papillomavirus infection—a polymerase chain reaction study.

M FIMIANI, C MAZZATENTA, M BIAGIOLI, L ANDREASSI. Arch Dermatol Res 1993;285:250.

Presence of human papillomavirus DNA in condylomata acuminata in children and adolescents.

K YUN, L JOBLIN. Pathology 1993;25:1.

Penile intraepithelial neoplasia-clinical presentation and an analysis of the physical state of human papillomavirus DNA. LM DEMETER, MH STOLER, W BONNEZ, et al. J Infect Dis 1993;168:38.

Diagnostic accuracy of the cytologic diagnosis of anal human papillomavirus infection compared with DNA hybridization

J VELASCO, V PALACIO, S VAZQUEZ, C MOS-QUERA, A SAMPEDRO. Sex Transm Dis 1993;20: 147.

Genital types of papillomavirus in children with HIV-1 infection in Kinshasa, Zaire.

ME STLOUIS, JP ICENOGLE, T MANZILA, et al. Int 7 Cancer 1993;54:181.

Human papillomavirus detection in cervical adenocarcinoma by polymerase chain

K MILDELANGOSCH, C SCHREIBER, G BECKER, T LONING, HE STEGNER. Hum Pathol 1993;24:

Human papillomavirus DNA sequences in adenocarcinoma of the uterine cervix in Indian women.

BC DAS, V GOPALKRISHNA, DK DAS, JK SHARMA, V SINGH, UK LUTHRA. Cancer 1993;72:147.

Low prevalence of human papillomavirus type-16 and type-18 in cervical adenocarcinoma in-situ, invasive adenocarcinoma and glandular dysplasia by polymerase chain reaction.

KR LEE, P HOWARD, NH HEINTZ, CC COLLINS. Mod Pathol 1993;6:433.

Detection of Epstein-Barr virus and human papillomavirus type-16 DNA in hairy leukoplakia by in-situ hybridisation and the polymerase chain reaction.

DJ FELIX, H JALAL, HA CUBIE, JC SOUTHAM, D WRAY, NJ MAITLAND. J Oral Pathol Med 1993; 22:277.

Failure of the polymerase chain reaction to detect human papillomavirus in transitional cell carcinoma of the bladder.

DR SALTZSTEIN, E ORIHUELA, JM KOCUREK, DA PAYNE, TS CHAN, SK TYRING. Anticancer Res 1993;13:423. Serological responses to human papillomavirus type-16 antigens in women before and after renal transplantation.

I LEWENSOHNFUCHS, D WESTER, P BIRTOLETTI, et al. J Med Virol 1993;40:188.

Association of the antibodies against human papillomavirus-16 E4 and E7 proteins with cervical cancer positive for human papillomavirus DNA.

T ONDA, T KANDA, S ZANMA, et al. Int J Cancer 1993;54:624.

Distribution of human papillomavirus types in genital lesions from two temporally distinct populations determined by in-situ hybridization.

SM ANDERSON, PK BROOKE, SL VANEYCK, H NOELL, WJ FRABLE. Hum Pathol 1993;24:547.

Detection of cutaneous and genital HPV types in clinical samples by PCR using consensus primers.

LM TIEBEN, I TERSCHEGGET, RP MINNAAR, et al. J Virol Meth 1993;42:265.

Polymerase chain reaction amplification and restriction enzyme typing as an accurate and simple way to detect and identify human papillomaviruses.

S PIZZIGHELLA, M RASSU, I PIACENTINI, BMASCHERA, G PALU. J Med Microbiol 1993;39:

Detection of human papillomavirus in cervical swab samples by viroPap and in cervical biopsy specimens by in-situ hybridization.

MP MEYER, RI CARBONELL, NA MAUSER, AI KANBOUR, AJ AMORTEGUI. Am J Clin Pathol 1993;100:12.

Use of probemix and omniProbe biotinylated cDNA probes for detecting HPV infection in biopsy specimens from the genital tract.

I ZEHBE, E RYLANDER, A STRAND, E WILANDER. J Clin Pathol 1993;46:437.

Two novel types of human papillomavirus, HPV-63 and HPV-65—comparisons of their clinical and histological features and DNA sequences to other HPV types.

K EGAWA, H DELIUS, T MATSUKURA, KAWASHIMA, EM DEVILLIERS. Virology 1993; 194:789.

Major histocompatibility complex and human papillomavirus type-16 E7 expression in high-grade vulvar lesions.

I JOCHMUS, M DURST, R REID, et al. Hum Pathol 1993;24:519.

The state of p53 in primary human cervical carcinomas and its effects in human papillomavirus-immortalized human cervical cells.

TM CHEN, CA CHEN, CY HSEIH, DY CHANG, YH CHEN, V DEFENDI. Oncogene 1993;8:1511.

Characterisation of human keratinocytes transformed by high risk human papillomavirus type-16 and type-18 and herpes simplex virus type-2.

KR DHANWADA, L GARRETT, P SMITH, KD THOMPSON, A DOSTER, C JONES. J Gen Virol 1993;74:955.

Herpes simplex virions interfere with the expression of human papillomavirus type-

S KARLEN, EA OFFORD, P BEARD. J Gen Virol 1993;74:965.

Identification and characterisation of novel promoters in the genome of human papillomavirus type-18. S KARLEN, P BEARD. J Virol 1993;67:4296.

Comparative lymphokine secretion by cultured normal human cervical keratinocytes, papillomavirus-immortalized and carcinoma cell lines.

CD WOODWORTH, S SIMPSON. Am J Pathol 1993;142:1544.

Prognostic significance of human papillomavirus genomes (type-16, type-18) and aberrant expression of p53 protein in human esophageal cancer.

M FURIHATA, Y OHTUSIKI, S OGOSHI, A TAKAHASHI, T TAMIYA,T OGATA. Int J Cancer 1993;54:226.

cell-type-specific transcription enhancer of type-16 human papillomavirus (HPV 16)-P (97) promoter is defined with HPV-associated cellular events in human epithelial cell lines.

A TANIGUCHI, K KIKUCHI, K NAGATA, S YASUMOTO. Virology 1993;195:500.

Inhibition of growth, transformation and expression of human papillomavirus type-16-E7 in human keratinocytes by

alpha-interferons.

MA KHAN, WH TOLLESON, JD GANGEMI, L PIRISI.

J Virol 1993;67:3396.

Cellular and molecular alterations in human epithelial cells transformed by recombinant human papillomavirus DNA. JA DIPAOLO, NC POPESCU, L ALVAREZ, CD WOODWORTH. Crit Rev Oncongen 1993;4:337.

Suppression of viral transformation in rat embryo fibroblasts cells immortalised with transforming genes of human papillomavirus type-16. H INOUE, M MIYASAKA, T INOUE, A HAKURA. Virology 1993;195:757.

Epidermal cancer associated with expression of human papillomavirus type-16 E6-oncogenes and E7-oncogenes in the skin of transgenic mice.

PF LAMBERT, HC PAN, HC PITOT, A LIEM, M JACKSON, AE GRIEP. Proc Nat Acad Sci USA 1993;90:5583.

Inhibition of cervical carcinoma cell line proliferation by the introduction of a bovine papillomavirus regulatory gene. ES HWANG, DJ RIESE, J SETTLEMAN, et al. J Virol 1993;67:3720.

Estrogen and progesterone human papillomavirus and DNA ploidy analysis in invasive carcinoma of the

cervix in pregnancy. DI ROBERTSON, D PASLAWSKI, MA DUGGAN, GCE STUART, JG NATION. Am J Clin Pathol 1993;

Metastatic conversion of cells by expression of human papillomavirus type-16 E6 and E7 genes.

LP CHEN, S ASHE, MC SINGHAL, DA GALLOWAY, I HELLSTROM, KE HELLSTROM. Proc Nat Acad Sci USA 1993;90:6523.

Nuclear factor-1 and epithelial cell-specific transcription of human papillomavirus type-16.

D APT, T CHONG, YC LIU, HV BERNARD. J Virol 1993;67:4455.

The E5 oncoprotein of human papillomavirus type-16 transforms fibroblasts and effects the downregulation of the epidermal growth factor receptor in keratinocytes.

SW STRAIGHT, PM HINKLE, RJ JEWERS, DJ McCance. $\Im Virol$ 1993;67:4521.

Repression of endogenous p53 transactivation function in HeLa cervical carcinoma cells by human papillomavirus type-16 E6, human MDM-2 and mutant

F HOPPESEYLER, K BUTZ. J Virol 1993;67:6111.

Human papillomavirus type-18 E7 protein requires intact Cys-X-X-Cys motifs for zinc binding, dimerization and transformation but not for Rb binding.

MC McIntyre, MG frattini, SR Grossman, LA Laimins. J Virol 1993;67:3142.

E6 of human papillomavirus type-16 can overcome the M1 stage of immortalization in human mammary epithelial cells but not in human fibroblasts.

JW SHAY, WE WRIGHT, D BRASISKYTE, BA VANDERHAEGEN. Oncogene 1993;8:1407.

HPV-16 E7 or adenovirus E1A can overcome the growth arrest of cells immortalised with a temperature-sensitive p53. KH VOUSDEN, B VOKTESEK, C FISHER, D LANE. Oncogene 1993;8:1697.

Cervical cytology and colposcopy

Screening for cervical cancer-prospects

D SOLOMON. J Nat Cancer Inst 1993;85:1018.

Detection of preinvasive cancer of the cervix and the subsequent reduction in invasive cancer.

R BERGSTROM, HO ADAMI, L GUSTAFSSON, J PONTEN, P SPAREN. J Nat Cancer Inst 1993;85: 1050.

Effect of organized screening on the risk of cervical cancer-evaluation of screening activity in Iceland, 1964-1991. K SIGURDSSON. Int J Cancer 1993;54:563.

Screening for cancer of the uterine cervix in Greenland.

NH NIELSON, H JENSEN. APMIS 1993;101:290.

Decision analysis for the best management of mildly dyskaryotic smear.

N JOHNSON, J SUTTON, JG THORNTON, RJ LILFORD, VA JOHNSON, JR PEEL. Lancet 1993;

Abnormal cervical cytology in pregnancy—a 17-year experience.

K ECONOMOS, NP VERIDIANO, I DELKE, ML COLLADO, ML TANCER Obstet Gynecol 1993; 81:915.

Combined analysis of cervical smears cytopathology, image cytometry and insitu hybridization.

H MULTHAUPT, E BRUDER, L ELIT, I ROTHBLAT, M WARHOL. Acta Cytol 1993;37:373.

Destruction of CIN-1 and CIN-2 with the Semm cold coagulator-13 years' experience with a see-and-treat policy.

HA LOOBUYCK, ID DUNCAN. Br J Obstet Gynaecol 1993;100:465.

The value of cytology and colposcopy in the follow up of cervical intraepithelial neoplasia after treatment by laser excision.

N MAHADEVAN, DH HORWELL. Br J Obstet Gynaecol 1993;100:563.

Other sexually transmitted diseases

Sexual transmission of hepatitis-C virus. D BRESTERS, WP MAUSERBUNSCHOTEN, HW REESINK, et al. Lancet 1993;342:210.

Low risk of sexual transmission of hepatitis-C virus.

NF HALLAM, ML FLETCHER, SJ READ, AM MAJID, JB KURTZ, CR RIZZA. J Med Virol 1993;40:251.

Risk factors for hepatitis-B virus infection in heterosexuals attending a venereal disease clinic in Copenhagen.

BB KVINESDAL, AM WORM, A GOTTSCHAU. Scand 7 Infect Dis 1993;25:171.

Sexual transmission of hepatitis-C virus and HIV-1 infection in female intravenous drug users.

A SALVAGGIO, M CONTI, A ALBANO, et al. Eur J Epidemiol 1993;9:279.

Genetic variations of the hepatitis-B virus and their clinical relevance.
T UCHIDA. Microbiol Immunol 1993;37:425.

Granuloma inguinale (Donovanosis) in women-an analysis of 61 cases from Durban, South Africa.

AGH BASSA, AA HOOSEN, J MOODI BRAMDEV. Sex Transm Dis 1993;20:164.

In vitro susceptibilities of isolates of Haemophilus ducreyi from Thailand and the United States to currently recommended and newer agents for the treatment of chancroid.

JS KNAPP, AF BACK, AF BABST, D TAYLOR, RJ RICE. Antimicrob Agents Chemother 1993;37: 1552.

A study of the nutritional requirements of a selected Haemophilus ducreyi strain by impedance and conventional methods.

M DZUIBA, PA NOBLE, WL ALBRITTON. Curr Microbiol 1993;27:109.

Antigen detection and immunological typing of Haemophilus ducreyi with a specific rabbit polyclonal serum.

EL ROGGEN, R PANSAERTS, E VANDYCK, P PIOT. J Clin Microbiol 1993;31:1820.

Public health and social aspects

Adolescents and condom use. A JOFFE. Am J Dis Child 1993;147:746.

Teenagers, sex and risk taking. a mellanby, f phelps, jh tripp. BMJ 1993; 307:25

University students' intention to seek medical care promptly if symptoms of sexually transmitted diseases were suspected.

G GODIN, C FORTIN, G MAHNES, et al. Sex Transm Dis 1993;20:100.

The effect of video interventions on improving knowledge and treatment compliance in the sexually transmitted disease clinic setting-lessons for HIV health education.

CG HEALTON, P MESSERI. Sex Transm Dis 1993; 20:70.

Microbiology and Immunology

Review article-T-cells reactive arthritis. E HERMANN. APMIS 1993;101:177.

Dermatology

Vulvar melanoma reconsidered. KY LOOK, LM ROTH, GP SUTTON. Cancer 1993; Vulvitis chronica plasmacellularis (Zoon's vulvitis).

GM KAVANAGH, PA BURTON, CTC KENNEDY. Br J Dermatol 1993;129:92.

Miscellaneous

Health gains from screening for infection of the lower genital tract in women attending for termination of pregnancy. AL BLACKWELL, PD THOMAS, K WAREHAM, SJ EMERY. Lancet 1993;342:206.

Improving the sexual health of the nation. C BIGNELL. BMJ 1993;307:145.

Infectious disease—antenatal interventions against sexually transmitted disease in Africa.

P MATONDO. Lancet 1993;341:1565.

The pelvic pain syndrome. JO DRIFE. Br J Obstet Gynaecol 1993;100:508.

Effect of antimicrobial treatment on chronic reactive arthritis.

A TOLVANEN, T YLIKERTTULA, R LUUKKAINEN, r merilahtipalo, k granfors, j seppala. Clin Exp Rheumatol 1993;11:301.

Local intravaginal desensitization to seminal fluid.

SM MATLOFF. J Allergy Clin Immunol 1993;91: 1230.

Fungal infections of the genitourinary

GJ WISE, DA SILVER. J Urol 1993;149:1377.

Epididymitis from Enterobius vermicularis—a case report. G SAYGI. J Urol 1993;150:487.

Papillary cystadenoma of the epididymis-a report of two cases with an immunohistochemical study.

CJ CALDER, J GREGORY. Histopathol 1993;23:89.

Pathologic features of epidermoid carcinoma of the penis—a prospective study of 66 cases.

AL CUBILLA, J BARRETO, C CABALLERO, G AYALA, M RIVEROS. Am J Surg Pathol 1993;17:

Tuberculous epididymitis and epididymoorchitis-sonographic findings.

SH KIM, HM POLLACK, KS CHO, MS POLLACK, MC HAN. J Urol 1993;150:81.

The use and physical effects of intravaginal substances in Zairian women.

RC BROWN, JE BROWN, OB AYOWA. Sex Transm Dis 1993;20:96.

Sexually transmitted diseases and family planning-strange or natural bedfellows, revisited.

W CATES. Sex Transm Dis 1993;20:174.

Seventeen year review of sexual and contraceptive behavior on a college campus. RW HALE, DFB CHAR, K NAGBY, N STOCKERT.

Am J Obstet Gynecol 1993;168:833.

Incidence of sexually transmitted diseases among college students.

H NACCACHE, G MANHES, C FORTIN, et al. Can Med Assoc J 1993;148:1937.

Risk profiles and epidemiologic interrelationships of sexually transmitted diseases. G HART Sex Transm Dis 1993;20:126.